SITE REQUIREMENTS & INSTALLATION DSD-201 & SSD-102

The purpose of this section is to provide the customer with requirements that need to be met before the DSD/SSD can be properly installed.

1 APPLICABLE DOCUMENTS

- DSD-201/SSD-102 User & Service Manuals

2 SITE OVERVIEW

These criteria must be met to ensure proper operation of the reprocessor. It is the responsibility of the customer to connect the DSD-201/SSD-102 to the building supply during the installation process. This means the ventilation, electrical and plumbing (water supply lines and drain) are the customer's responsibility.

3 WATER SUPPLY (POTABLE)

Water connection to the unit is on the right side of the cabinet. The adapter attached to the unit is a 3/8" female NPT fitting. Water connections on the Pre-filtration system are 1/2" female NPT.

- The incoming water line must be a minimum of 1/2" providing a flow rate of 3.2 GPM with a maximum temperature of 110°F (43°C). (Cold water supply is preferred).
- The incoming water pressure must be a minimum of 40 PSI and not to exceed 100 PSI.
- A shut-off valve must be installed before the pre-filtration system. It is important that the valve be mounted within the operator's reach.

4 DRAIN

The drain connection to the reprocessor is located on the backside of the cabinet 25 inches from the bottom of the DSD cabinet. The installation kit includes 1-inch elbow and 36 inches of 1-inch diameter drain hose to be mounted during installation.

- Drain system should not be higher than 18 inches from the floor.
- Drain system must be capable of handling at least 5 gallons per minute.

5 ELECTRICAL SUPPLY

110V Reprocessors are supplied with a hospital grade, grounded plug that can be connected to any standard 15A outlet.

- It is important to have the electrical outlet within the operator's reach since the unit does not have a main ON/OFF switch.
- Installation of a surge protector is recommended to protect the DSD/SSD from power fluctuations.

6 VENTILATION

During cycle operation and chemical heating process chemical vapors are produced. It is a health and safety requirement to have sufficient air changes, at least 10 to 12 times per hour in the room to dissipate the chemical vapor.

The flow of air should be considered by the customer as well. Air should flow away from the front of the unit to the back, thus drawing fumes away from the operator's face. PPE should be used as required.

The unit may be supplied with an active or passive vapor management system to aid in chemical vapor management. Please refer to the purchase order to determine the correct configuration of the reprocessor.

7 SPACE AND FLOORING

The reprocessor contains leveling pads that can be adjusted during installation. It is recommended to have a fairly level floor since the leveling ability of the pads is limited. It is required to have sufficient space to place the reprocessor along with all external components such as pre-filtration, water regulator, water shut off valve and the ventilation system (if applicable).

- Reprocessor Dimensions: 46" x 36" x 21" (HxWxD) the height with lid open is 64".
- 4" inches of space is required to the right side of the unit.
- Units equipped with passive vapor management system require 7" clearance from the back wall.
- Units equipped with active vapor management system require 12" clearance from back to wall.
- Units not equipped with ventilation system require 4" clearance from the back wall.

8 DSD-201 SITE REQUIREMENTS CHECKLIST

The Installation Checklist is utilized to ensure the installation site meets the required specifications. If all requirements are met, the site is suitable for the installation of the reprocessor.

SECTION	CUSTOMER SITE REQUIREMENTS CRITERIA	
1	Water supply provides a minimum flow rate of 3.2 GPM (12 liters/minute)	
1	Water supply provides a minimum pressure of 40 PSI (2.75 BAR)	
1	Is the water supply cold water only, with a maximum temperature of 110°F (43°C)	
1	Appropriate water pre-filtration requirements have been met, based on particulate analysis results. *(NOTE: this action is strongly recommended)*	
1	Incoming water supply fed through a minimum 1/2" line	
2	Intended drain outlet no more than 18" from the floor	
2	Drain requirements met for the installation site (5 GPM; 18.9 liters/min)	
3	Fused outlet within 3 feet (1 meter) of the installation site	
4	Site adequately ventilated to meet OSHA requirements for LCG use (A minimum of 10/12 air exchanges per hour required)	
5	Proposed installation area has a level floor	
5	Installation site accommodates the unit's dimensions (DSD=H46"/W36"/D21")	
5	Adequate space for the lids to be fully opened (64" from floor)	
5	Adequate wall or under-cabinet space for installation of the water pre-filtration system	
5	Adequate space to make plumbing connections to the unit (4 inches required)	

This checklist should be utilized to ensure the installation site meets the required specifications. If all specifications are met, the site is suitable for the installation and use of the DSD-201 and SSD-102 Automated Endoscope Reprocessors.

SITE REQUIREMENTS & INSTALLATION DSD-201 & SSD-102

The purpose of these instructions is to provide consistent installation of the DSD-201, SSD-102.

1 APPLICABLE DOCUMENTS

- DSD-201/SSD-102 Users Manuals
- DSD-201/SSD-102 Service Manuals

2 INSTALLATION KIT

The reprocessor is provided with an installation kit to help the customer adapt the unit to building supplies. The following items, (included in the kit) are used during installation.

ITEMS	DESCRIPTION
1	3/8" Water Regulator
2	Pressure Gauge
3	3/8" plug
4	Pre-filtration system
5	1-micron filter
6	0.45-micron filter
7	Filter wrench
8	1-inch drain hose
9	1-inch drain elbow
10	Pre-filter installation hose kit

3 INSTALLATION

Move the reprocessor to the installation location before removing the protective packaging material. If this is not possible, use a hand truck or moving dolly and ensure the reprocessor is not damaged. The reprocessor must be installed on a level surface or be adjusted to level. Adjust the leveling pads after unpacking the reprocessor. During installation, be sure the lower reservoir covers are in place, to prevent drill shavings and chips or other debris from entering the reservoirs.

4 WATER SUPPLY (POTABLE) AND PRE-FILTERS

- If not already installed, an incoming water shut-off valve must be installed upstream of the pre-filter system.
- The shut-off valve must be easily accessible to users to shut off when not in use.
- Install the incoming water pre-filter system supplied with the reprocessor (se Figure 1). The user must have easy access to the filters. There should be enough room below the filter assembly to easily remove the housings and change the filters.
- Install the external regulator between the outlet of the pre-filter assembly and the DSD/SSD.

- Attach the SS hose to the regulator. This attaches to the water inlet of the DSD/SSD. The installation kit ships with hardware that should fit most installations. If not, hardware may be sourced locally.

Ensure that the incoming water pressure regulator provides a flow rate of 3.2 gal/min (12 liters/min) at a pressure 35-40 PSI (2.40-2.75 BAR).

- Incoming water pressure to the regulator must be less than 90 PSI (6.2 BAR).
- The external regulator's water pressure (regulator and gaauge not shown) is set between 35-40 PSI (2.40-275 BAR). This is done during the flush cycle after the unit is ready for cycle verification.

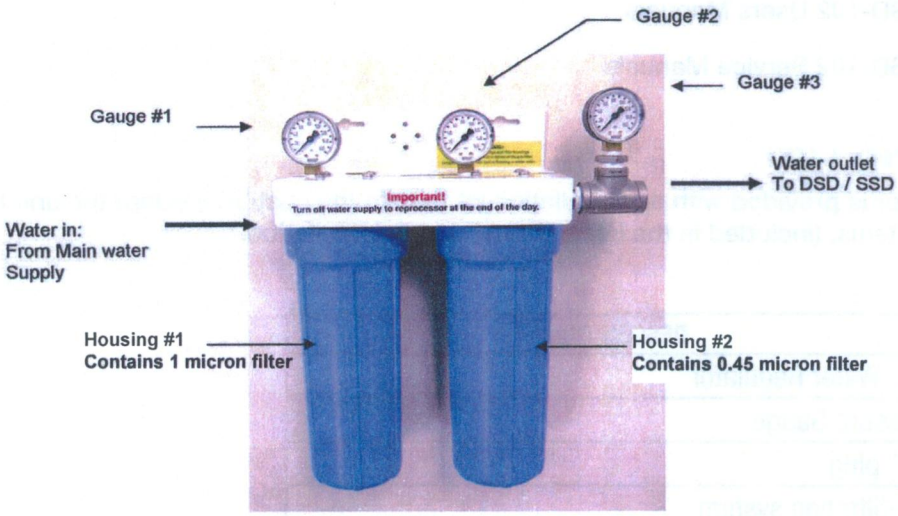

Figure 1. Filtration System

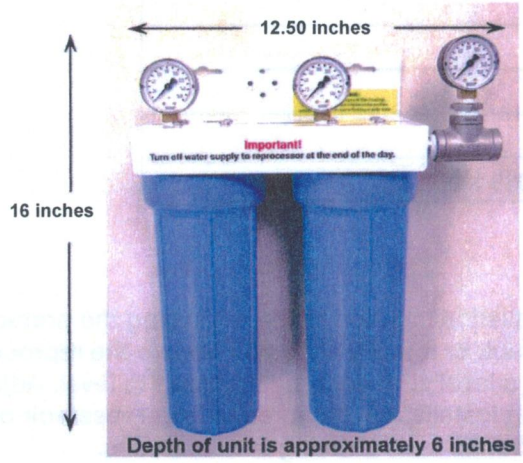

Figure 2. Filtration System Dimensions

WARNING: DO NOT over-tighten filter housings (hand-tighten only). Over-tightening will result in failure of the pre-filter components, which can lead to flooding or water leaks. Plumbing fittings should be hand tightened followed by one complete turn with the appropriate wrench.

5 PURPOSE

These instructions cover the installation of Pressure Regulator DSD-111 and Pre-filter MK01-0033.

6 WATER SUPPLY

- Use a cold water line with a pressure of less than 90 PSI (6.2 BAR) to the regulator at a maximum temperature of 110°F (43°C).

> NOTE: If the water supply line is brought in from the opposite side of the system inlet, run it behind the machine close to the floor so that the disinfector can be flush against the wall with the water line running through the base recess.

- For optimum cycle performance, the water source supply must provide a flow rate of 3.2 gal/min (12 liters/min) at a dynamic pressure of 40-45 PSI (2.75-3.10 BAR) measured after the pressure regulator.

7 REGULATOR SET-UP

During a flush cycle, set the regulator to provide a water pressure to the DSD/SSD unit of 40-45 PSI (2.75-3.10 BAR).

> **WARNING:** DO NOT over-tighten filter housings (hand-tighten only). Over-tightening will result in failure of he pre-filter components, which can lead to flooding or water leaks. Plumbing fittings should be hand tightened followed by one complete turn with the appropriate wrench.

The accumulation of particulates in a filter can cause the water pressure to drop below the minimum required level. This can occur every two to six months, depending on water quality. A pressure differential of 5 PSI or greater between gauges on each side of a filter indicates a need for replacement. For example, if the pressure on gauge #2 is 35 PSI when the pressure on gauge #1 is 40 PSI, a filter change is required.

8 INSTALLATION

Dimensions of the water filter are shown in figure 2.

> NOTE: This unit is piped and assembled as shown with the outlet on the right side and gauge #1 (incoming water pressure) on the left (figure 1).

- Install the regulator (supplied in DSD/SSD accessory kit) between the filter assembly and the DSD/SSD.

> NOTE: Use 1/2-inch piping for all water line plumbing.

- Mount the filter assembly on the wall where the filters can be easily changed and the gauges checked.
- Connect the output of the filter assembly to the input of the regulator.
- Connect the output of the regulator to the DSD/SSD.

9 SYSTEM DRAIN

Connect the 1" drain elbow to the rear drain of the DSD-201/SSD-102. The elbow threads require Teflon tape.

Connect the drain tube provided with the reprocessor (36 inches of 1-inch diameter clear tubing) to the drain elbow. The drain tube must have 3 inches of drop (7.5 cm) or greater over the 36-inch length. Consult your maintenance department for multiple reprocessor installation.

CAUTION: The reprocessor drain relies on gravity flow. There must be no low spots or loops in the drain line. Fluid trapped in the drain line will interfere with free drainage and reprocessor function.

10 ELECTRICAL

CAUTION: The reprocessor does not have an ON/OFF switch. Be sure the reprocessor is positioned so that the power cord or main circuit breaker is accessible at all times.

WARNING: The reprocessor must be protectively grounded.

CAUTION: Operating the 110VAC reprocessor without a hook-up fitting may blow the 8-amp slow blow fuse.

This checklist will be utilized to ensure the proper installation of DSD-201 and/or SSD-102 Automated Endoscope Reprocessors. Upon completion of the installation, the unit will be ready for operation.

DSD-201 **SSD-102** *Circle one* **Serial Number:** _____

INSTALLATION CHECKLIST	
Unit leveled in its permanent installation location	
Adequate space to make plumbing connections to the unit (4 inches required)	
Drain outlet no more than 18 inches from the floor	
Water supply provides a minimum flow rate of 3.2 GPM (12 liters/min)	
Water supply provides a minimum pressure of 40 PSI (2.75 BAR)	
Time and date are set correctly	
Printer operates properly	
Reservoir heaters are set to the appropriate temperature required by the HLD manufacturer	
Basins fill and drain adequately during the disinfection phase (within 90 seconds)	
Basins fill and drain adequately during the rinse phase(s) (within 90 seconds)	
Alcohol and detergent reservoirs function properly (level drops after each cycle)	
Internal 0.2 µ filter installed and disinfected properly (per User and Service manual procedure)	
Water, HLD or air leaks detected during unit operation or idle state	
Log function and Level Sensor functions engaged (per User and Service manual recommendations)	
Three full cycles completed without an alarm ❒ Yes	
Disinfectant has been loaded ❒ Yes ❒ No If No, the HLD tanks must be emptied of test water and the unit unplugged.	

11 INSTALLATION VERIFICATION

To be sure that the system is ready to operate, perform a trial run with water as outlined below. Use the Restrictor Hook-up to simulate an endoscope.

Three full cycles must be completed without an alarm.

- Verify the unit is level. Watch the rear basin overflow during the HLD cycles. Fluid should not flow over this drain.
- If fluid escapes over the drain during the HLD cycle the unit is not level. Adjust the screw pads and re-test.
- Load the lower reservoirs with water. Use the procedure described in the Operator Controls Chapter of the User Manual for loading disinfectant.
- Press the START button.
- Check the flow through the tubing during the disinfect, air, and rinse cycle.
- Check if incoming water pressure regulator provides a flow rate of 3.2 gal/min (12 liters/min) at a pressure of 35-40 PSI (2.4 -2.75 BAR). ***Only adjust the External Water Regulator during the Flush cycle.***
- Only adjust the internal regulators to 18-20 PSI during the Flushing cycle.
- Verify the cycle completes with no errors.
- Verify there is no fluid on the floating lid after a cycle.
- Verify there are no leaks in the reprocessor.

- Press DISINFECTANT DUMP and START on the control panel to run a dump cycle. Refer to the "Disinfectant Dump" procedure in the Operation chapter of the User Manual.
- After the disinfectant dump cycle is complete, load fresh disinfectant.
- Perform a water line disinfection procedure (Setup 6) per the User manual, using the restrictors. When the disinfection cycle is complete, top off the B side reservoir.
- Verify the cycle completes with no errors.

12 INSTALLATION CHECKLIST

The Installation Checklist is used to document that the reprocessor has been properly installed, tested and is ready for operation.

Medivators Website "Resource Center"

Go to: www.minntech.com/medivators, Select "Resource Center" and "User Library" for detailed user guides and hook-up matrices, report forms and logs, and product bulletins

Medivators Customer and Technical Support Toll Free: Phone: 1-800-444-4729 · FAX: 1-866-421-7696

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DAILY CHECKLIST DSD-201

Daily Startup Checklist

TASK	ACTION	
1. Verify machine is on.	The DSD-201 should not be unplugged during normal use.	
2. Open incoming water line valve.	Confirm that the static water pressure is at least 35-40 PSI (2.4-2.75 BAR)	
3. Check the disinfectant level.	Add disinfectant, as needed, to avoid alarms and to properly disinfect endoscope.	
4. Check the disinfectant temperature.	If a heated disinfectant is being used, check its temperature by using the SET UP FUNCTION 13.	
5. Check the expiration date of the disinfectant.	Do not use disinfectant beyond the manufacturer's recommended re-use life, even if the minimum effective concentration (MEC) is acceptable.	
6. Test the potency of the disinfectant in both reservoirs, prior to each use.	Use a test strip recommended by the disinfectant manufacturer. Replace any disinfectant if that does not meet effective concentration.	
7. Check the alcohol level.	Add alcohol, if necessary, to avoid alarms.	
8. Check the time/date and program number selected on the display.	Adjust using Set up Functions, if needed.	
9. Check the printer paper and ribbon level.	Change, if needed.	
10. Check filters logs.	Confirm all filters are being changed at required intervals:	
	1 and .45 micron External Water Filters	Replace when water pressure of 40 PSI cannot be maintained.
	0.2 micron Internal Water Filter	Replace and disinfect filter & water lines every 6 months (maximum).
	Disinfectant Filter	Replace with every disinfectant change
	Air Filter	Replace every 3 months.

Daily Shutdown Checklist

TASK	ACTION
1. Close incoming water line valve.	To protect facility & filter housings.
2. Wipe down basins and basin covers	Do not use alcohol-based products on the DSD-201, as they cause dryness, crazing and cracking.

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DISINFECTANT EFFICACY MONITORING LOG

REPROCESSOR TYPE:_____ SERIAL NO.: _____

DISINFECTANT:_____ TEST STRIP: _____

DATE TESTED	PASS / FAIL (circle one)		HLD CHANGE? Yes / No	HLD LOT #	INITIALS	TEMP (°C / °F)	COMMENTS
	P	F					
	P	F					
	P	F					

FILTER CHANGE LOG DSD-201, SSD-102

SERIAL #:

DISINFECTANT FILTER (MF01-0011)		WATER FILTERS			WATERLINE SANITIZATION (Performed with every 0.2 micron filter change)		AIR FILTERS (MF01-0028)		CHARCOAL FILTER For Vapor Mgmt. (MF01-0037)
Station A	Station B	1 MICRON (MF01-0014)	0.45 MICRON (MF01-0015)	0.2 MICRON (MF01-0013)			Station A	Station B	
CHANGE WITH EVERY DISINFECTANT CHANGE		PRESSURE BELOW 40 PSI OR EVERY 3 MONTHS		EVERY 6 MONTHS (MAX)	(CIRCLE ONE)		EVERY 3 MONTHS		EVERY 6 MONTHS
Date/Initials	Date/Initials	Date/Initials	Date/Initials	Date/Initials			Date/Initials	Date/Initials	Date/Initials
					YES	NO			
					YES	NO			
					YES	NO			
					YES	NO			
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					YES	NO			
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					YES	NO			
					YES	NO			
					YES	NO			
					YES	NO			
					YES	NO			

DSD™-201 Quick Start Guide

Refer to User Manual for more detailed instructions.

1 TEST
Disinfectant Concentration

- Using recommended test strips, determine if disinfectant meets Minimum Effective Concentration (MEC) as specified by manufacturer.
- Replace disinfectant if beyond reuse life date or below MEC.

2 LOAD
Endoscope

- Upon completion of manual cleaning process, place endoscope in basin with control head in right rear corner.
- Refer to Hookup Application Guide for correct hook-up for specific endoscope models.
- Connect hook-up and leak test adapter (if applicable) to basin.

3 ATTACH
Endoscope Hook-up

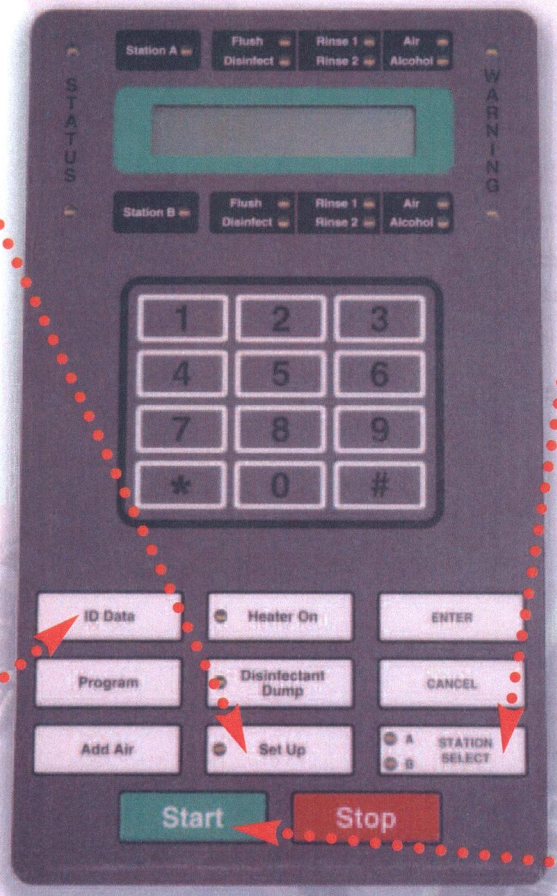
- Connect appropriate hook-up to endoscope.
- Verify tubing is not kinked or pinched.
- Place floating lid on basin and close reprocessor lid.

4 VERIFY
Disinfectant Temperature

If using heated disinfectant, verify solution is at proper temperature:

- Press "Setup"
- Enter "13"
- Press "Enter"
- Side A and B temperature display:
  Basin temperature on left
  Reservoir temperature on right

If heated disinfectant is at room temperature, allow 1.5 -2 hours to reach operating temperature.



5 SELECT
Reprocessing Program

- Press "Station Select" to choose station A or B
- Press "Program"
- Select program number: 1-9
- Press "Enter"

6 ENTER
ID Data

- Press "Station Select" to choose station A or B
- Press "ID Data" to enter scope, operator, patient, and physician data (as applicable)
- Enter ID Number(s)
- Press "Enter"

7 START
Reprocessing Cycle

- Press "Start" to begin reprocessing cycle
- If leak test option is enabled, reprocessing cycle will start after 40 second leak test is performed.

www.minntech.com

MEDIVATORS® REPROCESSING SYSTEMS

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